# CALIFORNIA

# Automatic Fire Extinguishing Systems

## LAW & REGULATIONS

*Laws Extracted from the Health and Safety Code,*
*Regulations from the California Administrative Code*
*Title 19 -- Public Safety*

OFFICE OF

**STATE FIRE MARSHAL**

**JOHN TENNANT**

**State Fire Marshal**

# Chapter 5. Automatic Fire Extinguishing Systems

## Article 1. Administration

### § 901. Scope.

These regulations apply to all automatic fire extinguishing systems identified in Health and Safety Code Section 13195, and supervisory equipment attached to those systems. These regulations shall not apply to any of the following:

(a) Portable fire extinguishers regulated under Section 13160, Health and Safety Code.

(b) Automatic fire extinguishing systems on vehicles except when the vehicle is used as an occupancy regulated by the State Fire Marshal.

(c) Automatic fire extinguishing systems installed in dwellings and lodging houses as defined in the 1979 Edition of the Uniform Building Code. Copies available from I.C.B.O. 5360 South Workman Mill Road, Whittier, CA 90601.

(d) Evaluation or testing of an automatic fire extinguishing system that does not encompass service as required in these regulations and which is conducted for insurance purposes.

NOTE: Authority cited: Sections 13195 and 13196.5, Health and Safety Code. Reference: Section 13195, Health and Safety Code.

HISTORY

1. New Article 1 (Section 901) filed 7-15-83; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 83, No. 29).

## Article 2. Definitions

### § 902. "A" Definitions.

(a) Automatic Fire Sprinkler System. An extinguishing system which uses water as its primary extinguishing agent and is usually designed in accordance with National Fire Protection Association Standard 13. These systems shall include but not be limited to:

(1) Wet Pipe Sprinkler Systems
(2) Dry Pipe Sprinkler Systems
(3) Deluge Sprinkler Systems
(4) Pre-Action Sprinkler Systems
(5) Dry Pipe Pre-Action Sprinkler Systems
(6) Fixed Water Spray Systems
(7) Deluge Foam Water Spray Sprinkler Systems
(8) Foam Water Spray Systems

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195-13199.5, Health and Safety Code.

HISTORY

1. New Subchapter 5 (Articles 2 and 5, Sections 902.1-905.3, not consecutive) filed 1-17-83 as an emergency; effective upon filing (Register 83, No. 4). A Certificate of Compliance must be transmitted to OAL within 120 days or emergency language will be repealed on 5-17-83. For prior history, see Registers 79, No. 9, and 74, No. 27.
2. Certificate of Compliance including renumbering and amendment of Section 902.1 to Section 902 transmitted to OAL 5-16-83 and filed 6-15-83 (Register 83, No. 26).

### § 902.4. "E" Definitions.

(a) Employee. Those persons who work for a licensed concern which may include but are not limited to assigned agents and others who work on a contractual basis with a licensee using service labels of the licensed concern.

(b) Engineered Fixed Extinguishing System. A system which is custom designed for a particular hazard, using components which are approved or listed only for their broad performance characteristics. Components may be arranged into a variety of configurations. These systems shall include but not be limited to:

(1) Dry Chemical Systems
(2) Carbon Dioxide Systems
(3) Halogenated Agent Systems
(4) Steam Systems
(5) High Expansion Foam Systems
(6) Foam Extinguishing Systems
(7) Liquid Agent Systems

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195-13199.5, Health and Safety Code.

HISTORY

1. Certificate of Compliance including renumbering and amendment of Section 902.5 to Section 902.4 transmitted to OAL 5-16-83 and filed 6-15-83 (Register 83, No. 26).

### § 902.9. "I" Definitions.

NOTE: Authority cited: Sections 13195 and 13196.5, Health and Safety Code. Reference: Sections 13195-13199.5, Health and Safety Code.

HISTORY

1. Order of Repeal of 1-17-83 order filed 6-15-83 by OAL pursuant to Government Code Section 11349.6 (Register 83, No. 26).
2. Editorial correction filed 6-28-83 (Register 83, No. 26).

### § 902.11. "L" Definitions.

(a) License. A document issued by the State Fire Marshal authorizing a concern to engage in the business of servicing or testing one or more types of automatic fire extinguishing systems.

(b) Licensee. A specific concern to which a license has been issued by the State Fire Marshal.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195-13199.5, Health and Safety Code.

HISTORY

1. Certificate of Compliance including renumbering of Section 902.12 to Section 902.11 transmitted to OAL 5-16-83 and filed 6-15-83 (Register 83, No. 26).

### § 902.12. "M" Definitions.

(a) Maintenance. An inspection of an automatic fire extinguishing system which includes the required procedures outlined in Sections 904.1, 904.3, and 904.5.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195-13199.5, Health and Safety Code.

History

1. Certificate of Compliance including renumbering and amendment of Section 902.13 to Section 902.12 transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 26).

### § 902.15. "P" Definitions.

(a) Pre–Engineered Fixed Extinguishing System. A system where the number of components and their configurations are included in the description of the systems approval and listing. These systems shall include but not be limited to:

(1) Dry Chemical Systems

(2) Carbon Dioxide Systems

(3) Halogenated Agent Systems

(4) Liquid Agent Systems

Note: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195–13199.5, Health and Safety Code.

History

1. Certificate of Compliance including renumbering and amendment of Section 902.16 to Section 902.15 transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 26).

### § 902.18. "S" Definitions.

(a) Service. A complete check of an automatic fire extinguishing system which includes the required service procedures outlined in Sections 904.2, 904.4, 904.6, 904.7 and required maintenance procedures outlined in Sections 904.1, 904.3 and 904.5.

(b) Standpipe System. A standpipe system is an arrangement of piping, valves, hose outlets, and allied equipment with outlets located in such a manner that water can be discharged through hose and nozzles attached to such hose outlets, for the purpose of extinguishing a fire. These systems shall include but not be limited to:

(1) Class I—For use by fire departments and those trained in handling heavy fire streams (2 1/2 inch or larger hose).

(2) Class II—For use primarily by the building occupants until the arrival of the fire department (1 1/2 inch hose).

(3) Class III—For use by either fire departments and those trained in handling heavy hose streams (2 1/2 inch or larger hose) or by the building occupants (1 1/2 inch or larger hose).

4. Combined System—For use where the water piping serves both 2 1/2 inch or larger outlets for fire department use and outlets for automatic sprinklers.

Note: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195–13199.5, Health and Safety Code.

History

1. Certificate of Compliance including renumbering and amendment of Section 902.19 to Section 902.18 transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 26).

### § 902.21. "V" Definitions.

(a) Valid License. A license which has not been suspended or revoked and for which all appropriate fees have been paid.

(b) Vehicle. As defined in Vehicle Code Section 670 and includes vessels as defined in Harbors and Navigation Code Section 651, and aircraft as defined in Public Utilities Code Section 21012.

Note: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195–13199.5, Health and Safety Code.

History

1. Certificate of Compliance including renumbering and amendment of Section 902.22 to Section 902.21 transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 26).
2. Editorial correction of subsection (a) filed 6–28–83 (Register 83, No. 26).

## Article 3. General Provisions

### § 903. Reports of Violations.

Any government entity taking action against a licensee pursuant to Health and Safety Code Sections 13145 and 13146 shall report such action in writing to the State Fire Marshal within 15 days of the action.

Note: Authority cited: Sections 13195 and 13197, Health and Safety Code. Reference: Sections 13195, 13196 and 13197.5, Health and Safety Code.

History

1. New Article 3 (Sections 903–903.2) filed 7–15–83; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 83, No. 29).

### § 903.1. Deceptive Practices.

(a) Any licensee, or employee thereof, who engages in unfair methods of competition or makes false or misleading statements as prohibited in Sections 17200 and 17500 of the Business and Professions Code shall be subject to license denial, revocation or suspension.

Note: Authority cited: Sections 13195 and 13197, Health and Safety Code. Reference: Sections 13195 and 13197.5, Health and Safety Code.

### § 903.2. Employer Responsibility.

Every licensee is responsible for the acts of its assigned agents or employees relating to servicing of automatic fire extinguishing systems for purposes of license denial, revocation or suspension.

Note: Authority cited: Sections 13195 and 13197, Health and Safety Code. Reference: Sections 13195 and 13197.5, Health and Safety Code.

## Article 4. Maintenance and Service

### § 904. Required Service Intervals.

(a) All automatic fire extinguishing systems, including systems installed as an alternate to other building requirements, shall be serviced and maintained in accordance with the following frequencies. Local authorities may require more frequent service and additional procedures.

(1) Standpipe systems shall be maintained operable at all times and maintenance inspection shall be performed at least semi–annually.

(2) Standpipe systems shall be serviced at least every five (5) years.

(3) Automatic fire sprinkler systems shall be maintained operable at all times and maintenance inspection shall be performed at least quarterly.

(4) Automatic fire sprinkler systems shall be serviced at least every five (5) years.

(5) Pre–engineered and engineered fixed extinguishing systems shall be serviced semi–annually, and immediately after a system activation.

(b) All standpipe and automatic fire sprinkler systems which were installed prior to January 1, 1963 shall receive initial service by July 1, 1985.

(c) All standpipe and automatic fire sprinkler systems which were installed between January 1, 1963 and January 1, 1973 shall receive initial service by July 1, 1986.

(d) All standpipe and automatic fire sprinkler systems which were installed between January 1, 1973 and January 1, 1979 shall receive initial service by July 1, 1987.

(e) All standpipe and automatic fire sprinkler systems which were installed after January 1, 1979, shall receive initial service within five (5) years of their date of installation.

(f) When proof of the installation date of standpipe systems or automatic fire sprinkler systems cannot be furnished, such systems shall receive initial service by July 1, 1985.

(g) Pre–engineered and engineered fixed extinguishing systems, regardless of installation date, shall be serviced within the time periods specified in Section (a)(5) above.

Note: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5, Health and Safety Code.

History

1. New Article 4 (Sections 904–904.7) filed 7–15–83; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 83, No. 29).
2. Amendment filed 7–3–84; effective thirtieth day thereafter (Register 84, No. 27).

### § 904.1. General Maintenance Requirements.

(a) A license shall not be required to perform maintenance inspections. Maintenance may be conducted by any person designated by the building owner or occupant.

(b) Records of all maintenance shall be retained for five (5) years by the building or system owner.

(c) The building or system owner shall insure immediate correction of any deficiencies noted during the maintenance inspection.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5, Health and Safety Code.

### § 904.2. General Service Requirements.

(a) All service on automatic fire extinguishing systems as set forth in Health and Safety Code Section 13195 shall be performed by concerns licensed by the State Fire Marshal.

EXCEPTIONS:

(1) The State Fire Marshal may waive in writing licensing of fire departments which conduct fire sprinkler and standpipe system service.

(2) Service on fire alarm systems and industrial systems as specified in 13196.5(b) and (c) Health and Safety Code may be conducted without a license.

(3) Service on automatic fire extinguishing systems exempted in writing by the State Fire Marshal, when the building owner or occupant has the staff and equipment to conduct a service.

(b) Any service of automatic fire extinguishing systems shall be performed in accordance with these regulations.

EXCEPTIONS:

(1) The State Fire Marshal may waive in writing the requirement that service be performed in accordance with these regulations when a licensee can demonstrate that a system cannot functionally be serviced in accordance with the requirements in these regulations.

(2) If at any time a licensee encounters a specialized or modified system which cannot be serviced according to these regulations, the licensee shall contact the State Fire Marshal and service the system as directed.

(A) The intent of this section is to cover specialty systems. It is not, however, intended to cover reporting deficient installations.

(c) Records of all service shall be retained for five (5) years by the building or system owner.

(d) The building or system owner shall insure immediate correction of any deficiencies noted during the service. A service tag shall be affixed to a system only after all deficiencies have been corrected.

(e) At the time of service, or at any time parts are replaced, an itemized invoice showing work performed and parts replaced shall be provided by the licensee to the system owner. If service is performed more than thirty (30) days prior to the next required service date, the invoice shall bear a statement indicating the system was serviced early.

(f) The licensee shall offer to return all replaced parts to the system owner or owners representative, except those parts that are required to be returned to the manufacturer under conditions of warranty.

(g) Prior to activating any fire alarm component of an automatic fire extinguishing system, the licensee shall insure that he is capable of restoring the fire alarm system.

(h) At the time of service, building management shall be consulted to avoid unnecessary disturbance of normal building operation.

(i) The licensed concern shall contact the local fire department prior to a system service when required by the local fire department to do so.

(j) The building or system owner shall provide the local fire department with a report of the results of any service when required by the local fire department to do so.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195.5 and 13196.5, Health and Safety Code.

### § 904.3. Maintenance Requirements for Standpipe Systems.

The following procedures shall be performed at each required maintenance inspection.

(a) Class I Standpipes.

| COMPONENTS<br>CHECK POINTS | CORRECTIVE ACTIONS |
|---|---|
| **FIRE DEPARTMENT CONNECTION** | |
| 1. Inlet caps missing. | 1. Inspect interior, replace. |
| 2. Couplings damaged and not rotating smoothly. | 2. Repair or replace, lubricate for smooth rotation. |
| 3. Gaskets missing or deteriorated. | 3. Replace gaskets. |
| 4. Clapper valves do not close completely. | 4. Repair. |
| 5. Visible or exterior obstructions. | 5. Remove. |
| 6. Not identified. | 6. Replace, repair or install sign. |
| **HOSE OUTLETS** | |
| 1. Cap missing. | 1. Replace. |
| 2. Fire hose connection threads damaged. | 2. Repair. |
| 3. Valve handles missing. | 3. Replace. |
| 4. Cap gaskets missing or deteriorated. | 4. Replace. |
| 5. Valve does not operate smoothly. | 5. Lubricate. |
| 6. Visible or exterior obstructions. | 6. Remove. |
| **PIPING** | |
| 1. Accessible piping damaged. | 1. Repair. |
| 2. Visible or exterior obstructions. | 2. Remove. |

(b) Class II Standpipes.

| COMPONENTS<br>CHECK POINTS | CORRECTIVE ACTIONS |
|---|---|
| **HOSE** | |
| 1. Mildew, cuts, abrasions and deterioration. | 1. Replace with approved lined hose. |
| 2. Coupling damaged. | 2. Replace or repair. |
| 3. Gaskets missing or deteriorated. | 3. Replace. |
| **NOZZLE** | |
| 1. Nozzle missing. | 1. Replace with approved nozzle. |
| 2. Gasket missing or deteriorated. | 2. Replace. |
| 3. Obstructions. | 3. Remove. |
| **HOSE OUTLET** | |
| 1. Damaged fire hose connection threads. | 1. Repair or replace. |
| 2. Valve handles missing. | 2. Replace handle. |
| 3. Corroded or leaking. | 3. Repair or replace. |
| **HOSE RACK OR REEL** | |
| 1. Difficult to rotate. | 1. Repair or replace. |
| 2. Damaged. | 2. Repair or replace. |
| 3. Obstructions. | 3. Remove. |
| 4. Hose improperly racked or rolled. | 4. Re-rack or re-roll. |
| **CABINET** | |
| 1. Difficult to open. | 1. Repair. |
| 2. Not readily distinguishable as containing fire equipment. | 2. Provide labeling. |
| 3. Visible or exterior obstructions. | 3. Remove. |

(c) Class III Standpipes.

| COMPONENTS<br>CHECK POINTS | CORRECTIVE ACTIONS |
|---|---|
| **FIRE DEPARTMENT CONNECTION** | |
| 1. Inlet caps missing. | 1. Inspect interior, replace. |
| 2. Couplings damaged. | 2. Replace or repair. |
| 3. Couplings not rotating smoothly. | 3. Lubricate. |
| 4. Gaskets missing or deteriorated. | 4. Replace. |
| 5. Clapper valves do not close. | 5. Repair. |
| 6. Visible or exterior obstructions. | 6. Remove. |
| 7. Not identified. | 7. Replace, repair or install sign. |

| HOSE OUTLETS | |
|---|---|
| 1. Cap missing. | 1. Replace. |
| 2. Damaged fire hose connection threads. | 2. Repair or replace. |
| 3. Valve handles missing. | 3. Replace. |
| 4. Cap gasket missing or deteriorated. | 4. Replace gasket. |
| 5. Visible or exterior obstructions. | 5. Remove. |

| PIPING | |
|---|---|
| 1. Accessible piping damaged. | 1. Repair. |
| 2. Visible or exterior obstructions. | 2. Remove. |

| HOSE | |
|---|---|
| 1. Mildew, cuts, abrasions and deterioration. | 1. Replace with approved lined hose. |
| 2. Couplings damaged. | 2. Replace hose. |
| 3. Gaskets missing or deteriorated. | 3. Replace. |

| NOZZLE | |
|---|---|
| 1. Missing. | 1. Replace with approved nozzle. |
| 2. Gasket missing or deteriorated. | 2. Replace. |
| 3. Obstructions. | 3. Remove. |

| HOSE OUTLET | |
|---|---|
| 1. Damaged fire hose connection threads. | 1. Repair or replace. |
| 2. Valve handles missing. | 2. Replace handle. |
| 3. Corroded or leaking. | 3. Repair or replace. |

| HOSE RACK OR REEL | |
|---|---|
| 1. Difficult to rotate. | 1. Repair or replace. |
| 2. Damaged. | 2. Repair or replace. |
| 3. Obstructions. | 3. Remove. |
| 4. Hose improperly racked or rolled. | 4. Re-rack or re-roll. |

| CABINET | |
|---|---|
| 1. Difficult to open. | 1. Repair. |
| 2. Not readily distinguishable as containing fire equipment. | 2. Provide labeling. |
| 3. Visible or exterior obstructions. | 3. Remove. |

| FIRE DEPARTMENT CONNECTION | |
|---|---|
| 1. Inlet caps missing. | 1. Inspect interior, replace. |
| 2. Couplings damaged and not rotating smoothly. | 2. Repair or replace, lubricate for smooth rotation. |
| 3. Gaskets missing or deteriorated. | 3. Replace gaskets. |
| 4. Clapper valves do not close completely. | 4. Repair. |
| 5. Visible or exterior obstructions. | 5. Remove. |
| 6. Not identified. | 6. Replace, repair or install sign. |

| HOSE OUTLETS | |
|---|---|
| 1. Cap missing. | 1. Replace. |
| 2. Fire Hose connection threads damaged. | 2. Repair. |
| 3. Valve handles missing. | 3. Replace. |
| 4. Cap gaskets missing or deteriorated. | 4. Replace gaskets. |
| 5. Visible or exterior obstructions. | 5. Remove. |

| PIPING | |
|---|---|
| 1. Accessible pipe damaged. | 1. Repair. |
| 2. Visible or exterior obstructions. | 2. Remove. |

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5, Health and Safety Code.

### § 904.4. Service Requirements for Standpipe Systems.

The following procedures shall be performed at each required service. The servicing concern shall also conduct a full maintenance inspection as outlined in 904.3.

(a) Class I standpipe system service.

(1) Before water is put into the system, an air test shall be conducted using air pressure not exceeding 25 p.s.i. Any leaks shall be repaired prior to continuing testing.

(2) The system shall be hydrostatically tested with outlet caps removed at 50 p.s.i. above its highest normal operating head pressure; but, in no case less than 150 p.s.i. for 3 minutes.

(3) A separate flow test shall be conducted using each fire department connection.

(4 A flow of 100 GPM shall be established out of the highest hose outlet for 3 minutes with the maximum friction loss in the system not to exceed 15 p.s.i. excluding loss for elevation.

(b) Class II standpipe system service:

(1) Each system shall be subjected to the flow test specified in Appendix G, Test Procedures for Fire Extinguishing Systems, Uniform Fire Code, 1979 Edition. Copies available from I.C.B.O., 5360 South Workman Mill Road, Whittier, CA 90601. The required flow must be maintained for 30 seconds by street mains or gravity tanks and for 2 minutes from systems supplied by booster pumps or pressure tanks.

(2) Each hose outlet shall be inspected in a manner that will indicate the valves are fully operable, that there is water pressure at each outlet, and that pressure reducing devices are installed.

(3) Systems supplied by gravity tank shall have the automatic filling system inspected to insure proper operation.

(4) On systems supplied by pressure tank the automatic filling system shall operate when the flow test is conducted. Air pressure and water supply gauges shall be inspected.

(c) Class III standpipe system service:

(1) A flow test shall be conducted. A minimum flow of 500 GPM at 65 p.s.i. shall be established from the topmost outlet of the most remote standpipe for 3 minutes. Fire pumps, if used, shall start automatically upon the opening of the topmost outlet of the most remote standpipe and should stop automatically once valve has been closed and the desired static pressure has been retained.

(2) Fie pumps, if any, shall be flow tested. If the pump performance characteristics as tested are more than 10 percent below the manufacturer's certified shop test characteristic curve or as specified on the pump housing, the pump shall be repaired and restored to its original condition. Do not draw residual pressure on pump below 20 p.s.i. when damage to public mains may occur.

(3) Each hose outlet shall be inspected in a manner that will indicate the valves are fully operable, that there is water pressure at each outlet, and that pressure reducing devices are installed.

(4) A back flush of the fire department connections shall be conducted to insure there are no obstructions.

(5) If provided, on site water supply shall be inspected to insure it operates when the flow test is conducted.

(d) Combined standpipe system service:

(1) A flow test shall be conducted. A minimum flow of 500 GPM at 65 p.s.i. shall be established from the topmost outlet of the most remote standpipe for 3 minutes. Fire pumps, if used, shall start automatically upon the opening of the topmost outlet of the most remote standpipe and should stop automatically once valve has been closed and the desired pressure has been retained.

(2) Fire pumps, if any, shall be flow tested. If the pump performance characteristics as tested are more than 10 percent below the manufacturer's certified shop test characteristic curve or as specified on the pump housing, the pump shall be repaired and restored to its original condition. Do not draw residual pressure on pump below 20 p.s.i. when damage to public mains may occur.

(3) Each hose outlet shall be inspected in a manner that will indicate the valves are fully operable, that there is water pressure at that outlet, and that pressure reducing devices are installed.

(4) A back flush of the fire department connections shall be conducted to insure there are no obstructions.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5, Health and Safety Code.

History

1. Editorial correction of subsection (a)(2) filed 7–29–83 (Register 83, No. 33).

## § 904.5. Maintenance Requirements for Automatic Fire Sprinkler Systems.

The following procedures shall be performed at each required maintenance inspection.

(a) Wet Pipe Sprinkler Systems.

| COMPONENT CHECK POINTS | CORRECTIVE ACTIONS |
|---|---|
| **FIRE DEPARTMENT CONNECTION** | |
| 1. Inlet caps missing. | 1. Inspect interior, replace. |
| 2. Couplings damaged. | 2. Repair or replace. |
| 3. Couplings do not rotate smoothly. | 3. Lubricate. |
| 4. Gaskets missing or deteriorated. | 4. Replace. |
| 5. Clapper valves do not close completely. | 5. Repair. |
| 6. Visible or exterior obstructions. | 6. Remove. |
| 7. Not identified. | 7. Replace, repair or install sign. |
| **CONTROL VALVES** | |
| 1. Valves leak. | 1. Repair. |
| 2. Valve not secured in open position. | 2. Open, secure. |
| 3. Visible or exterior obstructions. | 3. Remove. |
| **RISER** | |
| 1. Leaks. | 1. Repair. |
| 2. Visible or exterior obstructions. | 2. Remove. |
| 3. Bracing damaged. | 3. Repair. |
| **GAUGES** | |
| 1. Gauges damaged. | 1. Repair or replace. |
| 2. Gauge valves turned off. | 2. Turn on. |
| 3. System pressure. | 3. Record. |
| 4. Supply pressure. | 4. Record. |
| **SPRINKLERS** | |
| 1. Leaking, corroded or painted. | 1. Replace. |
| 2. Flow obstructed. | 2. Correct. |
| 3. Installed in incorrect position (upright or pendant). | 3. Correct. |
| 4. Extra sprinklers and wrench not available. | 4. Provide. |
| 5. Extra sprinklers not the same orifice size or temperature rating as in system. | 5. Provide. |
| **GRAVITY TANK, SUCTION TANK AND RESERVOIR SUPPLY** | |
| 1. Vessel damaged. | 1. Repair. |
| 2. Water level inadequate. | 2. Fill. Repair. |
| **PRESSURE TANK SUPPLY** | |
| 1. Tank damaged. | 1. Repair. |
| 2. Water level too high or too low. | 2. Fill or drain. Repair. |
| 3. Air pressure level low. | 3. Fill. Repair. |
| 4. Valves closed. | 4. Open. |

(b) Dry Pipe, Deluge, Pre–Action, Dry–Pipe Pre–Action Combination Systems, Fixed Water Spray Systems, Deluge Foam–Water Sprinkler Systems, Foam Water Spray Systems.

| COMPONENT CHECK POINTS | CORRECTIVE ACTIONS |
|---|---|
| **FIRE DEPARTMENT CONNECTION** | |
| 1. Inlet caps missing. | 1. Inspect interior, replace. |
| 2. Couplings damaged. | 2. Repair or replace. |
| 3. Couplings do not rotate smoothly. | 3. Lubricate. |
| 4. Gaskets missing or deteriorated. | 4. Replace. |
| 5. Clapper valves do not close completely. | 5. Repair. |
| 6. Visible or exterior obstructions. | 6. Remove. |
| 7. Not identified. | 7. Replace, repair, or install sign. |
| **CONTROL VALVES** | |
| 1. Valves leak. | 1. Repair. |
| 2. Valve not secured in open position. | 2. Open, secure. |
| 3. Visible or exterior obstructions. | 3. Remove. |
| **RISER** | |
| 1. Leaks. | 1. Repair. |
| 2. Visible or exterior obstructions. | 2. Remove. |
| 3. Bracing damaged. | 3. Repair. |
| **GAUGES** | |
| 1. Gauges damaged. | 1. Repair or replace. |
| 2. Gauge valves turned off. | 2. Turn on. |
| 3. Air pressure. | 3. Record. |
| 4. Water pressure. | 4. Record. |
| 5. Air supply not in service. | 5. Repair. |
| **SPRINKLERS** | |
| 1. Leaking, corroded or painted. | 1. Replace. |
| 2. Flow obstructed. | 2. Correct. |
| 3. Installed in incorrect position (upright or pendant). | 3. Correct. |
| 4. Extra sprinklers and wrench not available. | 4. Provide. |
| 5. Extra sprinklers not the same orifice size or temperature setting in system. | 5. Provide. |
| **GRAVITY TANK, SUCTION TANK AND RESERVOIR SUPPLY** | |
| 1. Vessel damaged. | 1. Repair. |
| 2. Water level inadequate. | 2. Fill. Repair. |
| **PRESSURE TANK SUPPLY** | |
| 1. Tank damaged. | 1. Repair. |
| 2. Water level too high or too low. | 2. Fill or drain. Repair. |
| 3. Air pressure level low. | 3. Fill. Repair. |
| 4. Valves closed. | 4. Open. |
| **DETECTION DEVICES** | |
| 1. Air piping damaged. | 1. Repair. |
| 2. Heat actuation devices damaged. | 2. Repair or replace. |
| 3. Electrical wiring damaged. | 3. Repair. |
| **FOAM EQUIPMENT** | |
| 1. Strainers dirty. | 1. Clean. |
| 2. Foam level low. | 2. Fill. |

Note: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5, Health and Safety Code.

History

1. Editorial correction of subsections (a) and (b) filed 7–29–83 (Register 83, No. 33).

## § 904.6. Service Requirements for Automatic Fire Sprinkler Systems.

The following procedures shall be performed at each required service. The servicing concern shall also conduct a full maintenance inspection as outlined in 904.5.

(a) Wet pipe sprinkler system service:

(1) A back flush of the fire department connections shall be conducted to insure that there are no obstructions.

(2) Post indicator valves, underground gate valves and O.S. & Y. valves shall be operated and examined for damage.

(3) A flow shall be conducted using the inspectors test valve. The system's audible device shall activate within 90 seconds of valve opening. All system flow switches shall be activated in accordance with the above provisions.

(4) A main drain test shall be conducted. Record pressure reading with main drain valve closed. Fully open the main drain valve and record the pressure reading. Close the valve and observe how quickly pressure is restored to determine if there are closed valves or obstructions in water supply lines.

(5) A test gauge shall be installed at the test gauge opening in order to determine accuracy of existing gauges.

(6) On systems supplied by gravity tanks, suction tanks and reservoirs the automatic filling system shall be inspected to insure proper operation.

(7) On systems supplied by pressure tank the air pressure gauge and water supply gauge shall be inspected and the automatic filling system shall operate during a system flow.

(8) All supervisory devices on all control valves shall be tested to insure they are functioning properly and that the alarm is transmitting to the appropriate location.

(9) Fire pumps, if any, shall be flow tested. If the pump performance characteristics as tested are more than 10 percent below the manufacturer's certified shop test characteristic curve or as specified on the pump housing, the pump shall be repaired and restored to its original condition. Do not draw residual pressure on pump below 20 p.s.i. when damage to public mains may occur.

(10) Pump supervisory devices shall be tested to insure they are functioning properly and that the alarm is transmitting to the appropriate location.

(b) Dry pipe, deluge, pre–action, dry pipe pre–action combination systems, fixed water spray systems, deluge foam–water sprinkler systems, foam water spray systems service.

(1) A back flush of the fire department connections shall be conducted to insure there are no obstructions.

(2) Post indicator valves, underground gate valves and O.S. & Y. valves shall be operated and examined for damage.

(3) The deluge, pre–action or dry pipe valve shall be inspected to insure it is in proper working order.

(4) An alarm bell test shall be conducted. The systems audible device shall activate within 90 seconds of valve opening. All systems flow switches shall be activated in accordance with the above provisions.

(A) Using the inspector's test on a drypipe, pre–action or deluge system will cause the system to trip. In order to conduct an alarm bell test,use the alarm test line on a drypipe, pre–action, or deluge system.

(5) A main drain test shall be conducted. Record pressure reading with main drain valve closed. Fully open the main drain valve and record the pressure reading. Close the valve and observe how quickly pressure is restored to determine if there are closed valves or obstructions in water supply lines.

(6) The air compressor shall be tested to insure it is working properly.

(7) All quick opening devices shall be tested to insure they are working properly.

(8) All deluge, pre–action or dry pipe valves shall be trip tested annually. The trip test shall be conducted by actuating the supplemental fire detection system.

(9) The location of dry–pipe valves shall be inspected to insure the valves are protected from freezing.

(10) All supervisory devices on all control valves shall be tested to insure they are functioning properly and that the alarm is transmitting to the appropriate location.

(11) Fire pumps, if any, shall be flow tested. If the pump performance characteristics as tested are more than 10 percent below the manufacturer's certified shop test characteristics curve or as specified on the pump housing, the pump shall be repaired and restored to its original condition. Do not draw residual pressure on pump below 20 p.s.i. when damage to public mains may occur.

(12) Pump supervisory devices shall be tested to insure they are functioning properly and that the alarm is transmitting to the appropriate location.

(13) On systems supplied by gravity tanks, suction tanks and reservoirs the automatic filling system shall be inspected to insure proper operation.

(14) On systems supplied by pressure tank the air pressure gauge and water supply gauge shall be inspected and the automatic filling system shall operate during a system flow.

(15) The manufacturer's and installer's written service and maintenance instructions which are on file with the State Fire Marshal shall also be followed when conducting the above service.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5 Health and Safety Code.

HISTORY

1. Editorial correction of subsections (a)(9) and (b)(11) filed 7–29–83 (Register 83, No. 33).

### § 904.7. Maintenance and Service Requirements for Engineered and Pre–Engineered Fixed Extinguishing Systems.

Maintenance and service shall be performed in accordance with the manufacturer's written instructions which are approved and on file with the State Fire Marshal.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13195 and 13195.5 Health and Safety Code.

## Article 5. Licensing

### § 905. Licenses.

(a) As specified in Health and Safety Code Section 13196.5, no person shall engage in the business of servicing automatic fire extinguishing systems without a valid license issued by the State Fire Marshal.

(b) Licenses shall be for the service of any one or combination of, the following:

(1) Type 1—Fire Sprinkler Systems.

(2) Type 2—Engineered and Pre–engineered Fixed Extinguishing System.

(3) Type 3—Standpipe Systems.

(c) (1) Application for a license to engage in the business of, or perform for a fee, the servicing of automatic fire extinguishing systems shall be made in writing to the State Fire Marshal on forms provided by him and shall be accompanied by the fees prescribed in Section 905.2 of these regulations.

(2) The application shall be signed by the sole proprietor, all partners in a partnership, or the corporation's authorized agent.

(3) The application shall be accompanied by a list of:

(A) All engineered and pre–engineered systems which the applicant intends to service by type of extinguishing agent and manufacturer's designation.

(B) Employees qualified to perform the service for which license is applied for and verification of the licensee's or his employee's training, education, and experience.

(C) Necessary equipment, supplies, and parts, for servicing systems for which a license is sought.

(d) Original licenses shall be valid from the date of issuance through December 31st of the year in which issued. Thereafter, each license shall be renewed annually and renewals shall be valid from January 1st through December 31st.

(e) Every license issued according to these regulations shall be posted on the premises of the licensed location. Licenses shall be readily avail-

able for inspection at any reasonable hour by the local inspection authority or by the State Fire Marshal.

(f) No licensee shall conduct business or solicit business under a name other than that which appears on his license.

(g) Possession of a license shall not authorize the licensee or his employee to enter any property or building or to enforce any provision of this subchapter.

(h) Every licensee shall notify the State Fire Marshal at his Sacramento office in writing within fifteen (15) days of any change of the licensee's address.

(i) A license is not transferable.

(j) Application for renewal shall be made on or before November 1st of the year in which the current license expires. Application for renewal shall be made in writing on forms provided by the State Fire Marshal and shall be accompanied by the prescribed fees.

(k) Application for renewal of any class of license which has expired for one year or more shall be considered as an original application.

(l) A duplicate license may be issued by the State Fire Marshal upon receipt of a written statement by the licensee describing the reasons for the duplicate issuance.

NOTE: Authority cited: Sections 13195 and 13197, Health and Safety Code. Reference: Sections 13196.5 and 13197, Health and Safety Code.

HISTORY

1. Certificate of Compliance including amendment transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 26).
2. Order of Repeal of former subsections (c)(2) and (d) from 1–17–83 order filed 6–15–83 by OAL pursuant to Government Code Section 11349.6 (Register 83, No. 26).
3. Editorial correction of subsections (g) and (h) filed 6–28–83 (Register 83, No. 26).

### § 905.1. Denial, Revocation and Suspension.

(a) The State Fire Marshal may order revocation or suspension pursuant to Chapter 5 (commencing with Section 11500), Part 1, Division 3, Title 2 of the Government Code.

(b) The issuance or renewal of a license may be denied by the State Fire Marshal for any of the following reasons:

(1) The applicant is not the real person in interest.

(2) Refusal to allow inspection by the State Fire Marshal or his duly appointed employees.

(3) The applicant for a license does not have access to the necessary equipment specified in the list required by Section 905(c)(3)(C) of these regulations.

(4) The applicant for a license or his employees do not possess the qualifications to conduct the operations for which the application is made.

(c) The denial, revocation or suspension of a license may be ordered by the State Fire Marshal for any violation of Section 13197.5, Health and Safety Code.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Sections 13197 and 13197.5, Health and Safety Code.

HISTORY

1. Certificate of Compliance including renumbering and amendment of Section 905.2 to Section 905.1 transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 26).
2. Editorial correction filed 6–28–83 (Register 83, No. 26).

### § 905.2. Fees.

(a) The original or renewal fee for licensees to service or test each type of automatic fire extinguishing systems shall be:

| | *Primary Location* | *Additional Location* |
|---|---|---|
| (1) Fire sprinkler system | $500 | $100 |
| (2) Engineered and pre–engineered fixed extinguishing systems | $500 | $100 |
| (3) Standpipe systems | $500 | $100 |

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Section 13198, Health and Safety Code.

HISTORY

1. Certificate of Compliance including renumbering of Section 905.3 to Section 905.2 transmitted to OAL 5–16–83 and filed 6–15–83 (Register 83, No. 27).
2. Editorial correction of NOTE filed 6–28–83 (Register 83, No. 26).

## Article 6. Labels

### § 906. Service Label.

(a) A service label conforming to this section shall be securely attached to each automatic fire extinguishing system at the time of service. The label shall be of the self–adhesive type with the option of a hanging type for engineered and pre–engineered systems. The label shall be placed:

(1) On the fire department connection or on the riser for Class I, III, and combined standpipes and on the hose outlet closest to the front door for Class II standpipes,

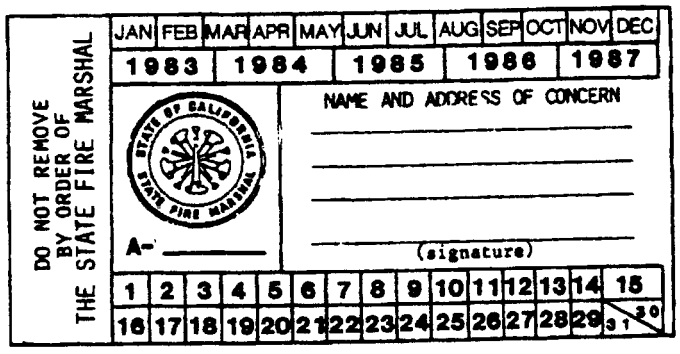
(2) On or adjacent to the fire department connection or on the riser for fire sprinkler systems and,

(3) On the agent supply tank or manual pull device for engineered and pre–engineered fixed systems.

(b) Labels shall be white with black letters. They shall be five and one–fourth inches (5 1/4″) in length, and two and five–eighth inches (2 5/8″) in width with a one–fourth inch (1/4″) tolerance for each dimension. One sample label shall be submitted to the State Fire Marshal for approval.

(c) Adhesive labels shall be manufactured in accordance with U. L. Standard 969, marking and labeling systems.

(d) The following format shall be used for all service labels.




(e) The following information shall be printed on service labels:

(1) The words "DO NOT REMOVE BY ORDER OF THE STATE FIRE MARSHAL."

(2) Concern Name.

(3) Concern Address.

(4) License Number. ("A" number.)

(5) Date service performed.

(6) The Seal of the Office of the State Fire Marshal.

(7) Space or line for signature of person performing or supervising the service work.

(f) When service is performed, the date of service, and the signature of the person performing or supervising the servicing shall be placed on the service label.

(g) No person shall remove a service label from, or place a service label on, an automatic fire extinguishing system except when service is performed (See Section 904.2(d)).

(h) No person shall deface, modify, or alter any service label attached to or required to be attached to any automatic fire extinguishing system.

NOTE: Authority cited: Section 13195, Health and Safety Code. Reference: Section 13195 Health and Safety Code.

HISTORY

1. New Article 6 (Section 906) filed 7–15–83; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 83, No. 29).